

Notice of Allowability

Application No.

10/591,446

Examiner

DUC C. HO

Applicant(s)

SHIMIZU ET AL.

Art Unit

2465

- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the preliminary amendment filed 06-26-2007.
2. ☒ The allowed claim(s) is/are 22-23, 26, 29-31, 24, 27, 25, 28, 33-40, 42, 41. Renumbered 1-20, respectively.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying Indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 01-23-2009; 09-01-2006
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 04-22-2010
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

EXAMINER 'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jason Rhodes on 04-22-2010.

The application has been amended as follows:

In the claims:

Claim 32 is canceled.

Claim 22, line 11, after "MAC frame", insert --- ,

the edge switch snoops a neighbor solicitation IP packet, and replaces the real MAC address of the source set in the MAC frame including the neighbor solicitation IP packet and the real MAC address of the source set in the neighbor solicitation IP packet with corresponding temporary MAC addresses, respectively, when the terminal transmits the neighbor solicitation IP packet, and

the edge switch snoops a neighbor advertisement IP packet, and replaces the real MAC address of the source set in the MAC frame including the neighbor advertisement IP packet and a target real MAC address set in the neighbor advertisement IP packet with corresponding temporary MAC addresses, respectively, when receiving the neighbor advertisement IP packet from the terminal ---.

Claim 37, line 10, after “MAC address”, insert --- , wherein
the edge switch snoops a neighbor solicitation IP packet, and replaces the real MAC
address of the source set in the MAC frame including the neighbor solicitation IP packet and the
real MAC address of the source set in the neighbor solicitation IP packet with corresponding
temporary MAC addresses, respectively, when the terminal transmits the neighbor solicitation IP
packet, and

the edge switch snoops a neighbor advertisement IP packet, and replaces the real MAC
address of the source set in the MAC frame including the neighbor advertisement IP packet and a
target real MAC address set in the neighbor advertisement IP packet with corresponding
temporary MAC addresses, respectively, when receiving the neighbor advertisement IP packet
from the terminal ---.

Reason for Allowance

2. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 22-31, and 33-42, the prior art fails to teach or suggest a layer 2 switch
network system that includes a terminal, comprising a plurality of layer 2 switches including an
edge switch, wherein the edge switch snoops a neighbor solicitation IP packet, and replaces the
real MAC address of the source set in the MAC frame including the neighbor solicitation IP
packet and the real MAC address of the source set in the neighbor solicitation IP packet with
corresponding temporary MAC addresses, respectively, when the terminal transmits the neighbor
solicitation IP packet, and the edge switch snoops a neighbor advertisement IP packet, and
replaces the real MAC address of the source set in the MAC frame including the neighbor

advertisement IP packet and a target real MAC address set in the neighbor advertisement IP packet with corresponding temporary MAC addresses, respectively, when receiving the neighbor advertisement IP packet from the terminal, in combination with other limitations, as specified in the independent claims 22 and 37.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Ho whose telephone number is (571) 272-3147. The examiner can normally be reached on Monday through Thursday from 7:30 am to 6:00 pm.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel, can be reached on (571) 272-2988.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/591,446
Art Unit: 2465

Page 5

Patent Examiner

/DUC C HO/

Primary Examiner, Art Unit 2465

04-22-2010